WHAT IS CLAIMED IS:

1. An isolated nucleic acid molecule which comprises DNA having at least about 80% sequence identity to (a) a DNA molecule encoding a PRO10282 polypeptide comprising the sequence of amino acid residues from about 1 to about 667 of Figure 2 (SEQ ID NO:2), or (b) a DNA molecule encoding a PRO19578 polypeptide having the sequence of amino acid residues from about 1 to about 658 of Figure 7 (SEQ ID NO: 5), or (c) the complement of the DNA molecule of (a) or (b).

2. The isolated nucleic acid molecule of Claim 1 comprising the sequence of (a) nucleotide positions from about 49 to about 2049 of Figure 1 (SEQ ID NO:1) or (b) nucleotide positions from about 186 to about 2159 of Figure 6 (SEQ ID NO: 4), or (c) the complement of the nucleotide sequence of (a) or (b).

3. The isolated nucleic acid molecule of Claim 1 comprising the nucleotide sequence of Figure 1 (SEQ ID NO:1) or Figure 6 (SEQ ID NO: 4).

4. The isolated nucleic acid molecule of Claim 1 comprising a nucleotide sequence that encodes (a) the sequence of amino acid residues from about 1 to about 667 of Figure 2 (SEQ ID NO:2), or (b) the sequence of amino acid residues from about 1 to about 658 of Figure 7 (SQ ID NO: 5).

5. An isolated nucleic acid molecule comprising DNA which comprises at least about 80% sequence identity to (a) a DNA molecule encoding the same mature polypeptide encoded by the human protein cDNA deposited with the ATCC on January 11, 2000 under ATCC Deposit No. PTA-1181 (DNA148380-2827), (b) a DNA molecule encoding the same mature polypeptide encoded by the human protein cDNA deposited with the ATCC on February 23, 2000 under ATCC Deposit No. PTA1402 (DNA148389-2827-1), or (c) [illegible] of the DNA molecule of (a) or (b).

6. The isolated nucleic acid molecule of Claim 5 comprising DNA encoding the same mature polypeptide encoded by (a) the human protein cDNA deposited with the ATCC on January 11, 2000 under ATCC Deposit No. PTA-1181 (DNA148380-2827), or

(b) the human cDNA deposited with the ATCC on February 23, 2000 under ATCC Deposit No. PTA-1402 (DNA148389-2827-1).

7. An isolated nucleic acid molecule comprising DNA which comprises at least about 80% sequence identity to (a) the full-length polypeptide coding sequence of the human protein cDNA deposited with the ATCC on January 11, 2000 under ATCC Deposit No. PTA-1181 (DNA148380-2827), or (b) the full-length polypeptide coding sequence of the human protein cDNAdeposited with the ATCC on February 23, 2000 under ATCC Deposit No. PTA-1402 (DNA148389-2827-1), or (c) the complement of the coding sequence of (a) or (b).

8. The isolated nucleic acid molecule of Claim 7 comprising (a) the full-length polypeptide coding sequence of the human protein cDNA deposited with the ATCC on January 11, 2000 under ATCC Deposit No. PTA-1181 (DNA148380-2827), or (b) the full-length polypeptide coding sequence of the human protein cDNA deposited with the ATCC on February 23, 2000 under ATCC Deposit No. PTA-1402 (DNA148389-2827-1).

9. An isolated nucleic acid molecule encoding a PRO10282 polypeptide comprising DNA that hybridizes to the complement of the nucleic acid sequence that enodes (a) amino acids 1 to about 667 of Figure 2 (SEQ ID NO:2), or (b) amino acids 1 to about 658 of Figure 7 (SEQ ID NO: 5).

10. The isolated nucleic acid molecule of Claim 9, wherein (a) the nucleic acid that encodes amino acids 1 to about 667 of Figure 2 (SEQ ID NO:2) comprises nucleotides 49 to about 2049 of Figure 1 (SEQ ID NO:1), and (b) the nucleic acid that encodes amino acids 1 to about 658 of Figure 7 (SEQ ID NO: 5) comprises nucleotides 186 to about 2159 of Figure 6 (SEQ ID NO: 4).

occurs under stringent hybridization and wash conditions.

An isolated nucleic acid molecule comprising DNA encoding a polypeptide

scoring at least 80% positives when compared to (a) the sequence of amino acid residues of from 1 to about 667 of Figure 2 (SEQ ID NO:2), or (b) the sequence of amino acid residues from 1 to about 658 of Figure 7 (SEQ ID NO: 5), or (c) the complement of the DNA of (a) or (b).

13. An isolated nucleic acid molecule comprising at least about 765 nucleotides and which is produced by hybridizing a test DNA molecule under stringent hybridization conditions with (a) a DNA molecule which encodes a PRO10282 polypeptide comprising a sequence of amino acid residues from 1 to about 667 of Figure 2 (SEQ ID NO:2), or (b) a DNA molecule which encodes a PRO19578 polypeptide comprising a sequence of amino acid residues from 1 to about 658 of Figure 7 (SEQ ID NO: 5), or (c) the complement of the DNA molecule of (a) or (b), and isolating the test DNA molecule.

14. The isolated nucleic acid molecule of Claim 13, which has at least about 80% sequence identity to (a), (b) or (c).

15. A vector comprising the nucleic acid molecule of any one of Claims 1 to 14.

16. The vector of Claim 15, wherein said nucleic acid molecule is operably linked to control sequences recognized by a host cell transformed with the vector.

17. A nucleic acid molecule deposited with the ATCC under accession number PTA-1181 (DNA148380-2827), or PTA-1402 (DNA148389-2827-1).

18. A host cell comprising the vector of Claim 15.

19. The host cell of Claim 18, wherein said cell is a CHO cell.

21. The host cell of Claim 18, wherein said cell is a yeast cell.

22. A process for producing a Stra6 polypeptide comprising culturing the host cell of Claim 18 under conditions suitable for expression of said Stra6 polypeptide and recovering said Stra6 polypeptide from the cell culture.

23. An isolated Stra6 polypeptide comprising an amino acid sequence comprising at least about 80% sequence identity to the sequence of (a) amino acid residues from about 1 to about 667 of Figure 2 (SEQ ID NO:2), or (b) amino acid residues from about 1 to about 658 of Figure 7 (SEQ ID NO: 5).

24. The isolated Stra6 polypeptide of Claim 23 comprising (a) amino acid residues 1 to about 667 of Figure 2 (SEQ ID NO:2), or 1 to about 658 of Figure 7 (SEQ ID NO: 5).

25. An isolated Stra6 polypeptide having at least about 80% sequence identity to the polypeptide encoded by (a) the cDNA insert of the vector deposited with the ATCC on January 11, 2000 as ATCC Deposit No. PTA-1181 (DNA148380-2827), or (b) the cDNA insert of the vector deposited with the ATCC on February 23, 2000 as ATCC Deposit No. PTA-1402 (DNA148389-2827-1).

26. The isolated Stra6 polypeptide of Claim 25 which is encoded by (a) the cDNA insert of the vector deposited with the ATCC on January 11, 2000 as ATCC Deposit No. PTA-1181 (DNA148380-2827), or (b) the cDNA insert of the vector deposited with the ATCC on February 23, 2000 as ATCC Deposit No. PTA-1402 (DNA148389-2827-1).

27. An isolated Stra6 polypeptide scoring at least 80% positives when compared (a) to the sequence of amino acid residues from 1 to about 667 of Figure 2 (SEQ ID NO:2), or (b) to the sequence of amino acid residues 1 to about 658 of Figure 7 (SEQ ID NO: 5).

residues from 1 to about 667 of Figure 2 (SEQ ID NO:2), or (b) amino acid residues 1 to about 658 of Figure 7 (SEQ ID NO: 5), or (c) a fragment of (a) or (b) sufficient to provide binding site for an anti-Stra6 antibody.

29. An isolated polypeptide produced by (i) hybridizing a test DNA molecule under stringent conditions with a DNA molecule encoding a Stra6 polypeptide comprising (a) the sequence of amino acid residues from 1 to about 667 of Figure 2 (SEQ ID NO:2), or (b) the sequence of amino acid residues 1 to about 658 of Figure 7 (SEQ ID NO: 5), or (c) the complement of the DNA molecule of (a), (ii) culturing a host cell comprising said test DNA molecule under conditions suitable for the expression of said polypeptide, and (iii) recovering said polypeptide from the cell culture.

30. The isolated polypeptide of Claim 29, wherein said test DNA has at least about 80% sequence identity to (a) or (b).

31. A chimeric molecule comprising a Stra6 polypeptide fused to a heterologous amino acid sequence.

32. The chimeric molecule of Claim 31, wherein said heterologous amino acid sequence is an epitope tag sequence.

33. The chimeric molecule of Claim 31, wherein said heterologous amino acid sequence is a Fc region of an immunoglobulin.

34. An antibody which specifically binds to a Stra6 polypeptide.

35. The antibody of Claim 34, which induces the death of a cell that expresses said polypeptide.

36. The antibody of Claim 35, wherein said cell is a cancer cell that over-[illegible] compared to a normal cell of the same tissue type.

[illegible] The antibody of Claim 34 which is a monoclonal antibody.

[illegible] The antibody of Claim 37 which comprises a non-human complementarity

determining region (CDR)or a human framework region (FR).

39. The antibody of Claim 34 which is labeled.

40. The antibody of Claim 34 which is an antibody fragment or a single-chain antibody.

41. The antibody of Claim 34 which is a humanized antibody.

42. A composition of matter which comprises an antibody of Claim 34 in admixture with a pharmaceutically acceptable carrier.

43. The composition of matter of Claim 42, which comprises a therapeutically effective amount of said antibody.

44. The composition of matter of Claim 42, which further comprises a cytotoxic or chemotherapeutic agent.

45. An isolated nucleic acid molecule that encodes the antibody of Claim 34.

46. A vector comprising the nucleic acid molecule of Claim 45.

47. A host cell comprising the vector of Claim 46.

48. A method for producing an antibody that binds to a Stra6 polypeptide, said method comprising culturing the host cell of Claim 47 under conditions sufficient to allow expression of said antibody and recovering said antibody from the cell culture.

50. An antagonist to a Stra6 polypeptide.

51. The antagonist of Claim 50, wherein said antagonist inhibits tumor cell growth.

52. A composition of matter comprising (a) a Stra6 polypeptide, (b) an agonist to a Stra6 polypeptide, (c) an antagonist to a Stra6 polypeptide, or (d) an anti-Stra6 antibody, in admixture with a pharmaceutically acceptable carrier.

53. An isolated nucleic acid molecule which comprises a nucleotide sequence having at least about 80% sequence identity to (a) a DNA molecule encoding amino acids 1 to X of Figure 2 (SEQ ID NO: 2), or of Figure 7 (SEQ ID NO: 5), where X is any amino acid from 49 to 59 of Figure 2 (SEQ ID NO: 2), or Figure 7 (SEQ ID NO: 5), or (b) the complement of the DNA molecule of (a).

54. The isolated nucleic acid of Claim 53 which comprises (a) a nucleotide sequence encoding amino acids 1 to X of Figure 2 (SEQ ID NO:2), where X is any amino acid from 49 to 59 of Figure 2 (SEQ ID NO:2), or (b) the complement of the nucleotide sequence of (a).

55. An isolated nucleic acid molecule which comprises (a) a nucleotide sequence encoding a polypeptide scoring at least about 80% positives when compared with an amino acid sequence of residues from about 1 to X of Figure 2 (SEQ ID NO:2), or of Figure 7 (SEQ ID NO: 5), where X is any amino acid from 49 to 59 of Figure 2 (SEQ ID NO:2), or of Figure 7 (SEQ ID NO: 5), or (b) the complement of the nucleotide sequence of (a).

56. An isolated soluble Stra6 polypeptide comprising an amino acid sequence having at least about 80% sequence identity to amino acids 1 to X of Figure 2 (SEQ ID NO:2), or of Figure 7 (SEQ ID NO: 5), where X is any amino acid from 49 to 59 of Figure 2 (SEQ ID NO:2) or of Figure 7 (SEQ ID NO: 5).

57. The isolated soluble Stra6 polypeptide of Claim 56 which comprises amino acids 1 to X of Figure 2 (SEQ ID NO:2), where X is any amino acid from 49 to 59 of Figure 2 (SEQ ID NO:2).

58. An isolated soluble Stra6 polypeptide comprising an amino acid sequence which scores at least about 80% positives when compared with the amino acid sequence of amino acids 1 to X of Figure 2 (SEQ ID NO:2), or Figure 7 (SEQ ID NO: 5), where X is any amino acid from 49 to 59 of Figure 2 (SEQ ID NO:2) or Figure 7 (SEQ ID NO: 5).

59. A method for determining the presence of a Stra6 polypeptide in a sample suspected of containing said polypeptide, said method comprising exposing the sample to an anti-Stra6 antibody, and determining binding of said antibody to said polypeptide in said sample.

60. The method of Claim 59, wherein said sample comprises a cell suspected of containing a Stra6 polypeptide.

61. The method of Claim 60 wherein said cell is a cancer cell.

62. A method of diagnosing tumor in a mammal, said method comprising detecting the level of expression of a gene encoding a Stra6 polypeptide (a) in a test sample of tissue cells obtained from the mammal, and (b) in a control sample of known normal tissue cells of the same cell type, wherein a higher expression level in the test sample, as compared to the control sample, is indicative of the present of tumor in the mammal from which the test tissue cells were obtained.

63. A method of diagnosing tumor in a mammal, said method comprising (a) contacting an anti-Stra6 antibody with a test sample of tissue cells obtained from the mammal, and (b) detecting the formation of a complex between said antibody and a Stra6 polypeptide in the test sample, wherein the formation of a complex is indicative of the

64. The method of Claim 63 wherein said antibody is detectably labeled.

65. The method of Claim 63 wherein said test sample of tissue cells is obtained from an individual suspected of having neoplastic cell growth or proliferation.

66. A cancer diagnostic kit comprising an anti-Stra6 antibody and a carrier in suitable packaging.

67. The kit of Claim 66 which further comprises instructions for using said antibody to detect the presence of a Stra6 polypeptide in a sample suspected of containing the same.

68. A method for inhibiting the growth of tumor cells, said method comprising exposing tumor cells that express a Stra6 polypeptide to an effective amount of an agent that inhibits a biological activity of said polypeptide, wherein growth of said tumor cells is thereby inhibited.

69. The method of Claim 68, wherein said tumor cells over-express said Stra6 polypeptide as compared to normal cells of the same tissue type.

70. The method of Claim 68, wherein said agent is an anti-Stra6 antibody.

71. The method of Claim 70, wherein said anti-Stra6 antibody induces cell death.

72. The method of Claim 68, wherein said tumor cells are further exposed to radiation treatment, a cytotoxic agent, or a chemotherapeutic agent.

73. The method of Claim 68, wherein said tumor cells are further exposed to [illegible] of the gene encoding Stra6.

74. The method of Claim [illegible] wherein said agent is retinoic acid or an analogue thereof.

75. The method of Claim 68, wherein said agent is an antisense oligonucleotide that hybridizes to a nucleic acid which encodes the Stra6 polypeptide or the complement thereof.

76. The method of Claim 75, wherein said tumor cells are further exposed to radiation treatment, a cytotoxic agent, or a chemotherapeutic agent.

77. The method of Claim 75, wherein said tumor cells are further exposed to an agent that stimulates the expression of the gene encoding Stra6.

78. The method of Claim 77, wherein said agent is retinoic acid or an analogue thereof.

79. An article of manufacture, comprising:

a container;

a label on the container; and

a composition comprising an active agent contained within the container, wherein the composition is effective for inhibiting the growth of tumor cells and wherein the label on the container indicates that the composition is effective for treating conditions characterized by over-expression of a Stra6 polypeptide in said tumor cells as compared to normal cells of the same tissue type.

80. The article of manufacture of Claim 79, wherein said active agent inhibits a biological activity of and/or the expression of said Stra6 polypeptide.

81. The article of manufacture of Claim 80, wherein said active agent is an anti-Stra6 antibody.

antisense oligonucleotide

82. A method of identifying a compound that inhibits a biological or

immunological activity of a Stra6 polypeptide, said method comprising contacting a candidate compound with said polypeptide under conditions and for a time sufficient to allow the two compounents to interact and determining whether a biological or immunological activity of said polypeptide is inhibited.

84. The method of Claim 83, wherein said candidate compound or said Stra6 polypeptide is immobilized on a solid support.

85. The method of Claim 84, wherein the non-immobilized compounent is detectably labeled.

86. A method for identifying a compound that inhibits an activity of a Stra6 polypeptide, said method comprising the steps of (a) contacting cells and a candidate compound to be screened in the present of said Stra6 polypeptide under conditions suitable for the induction of a cellular response normally induced by said Stra6 polypeptide, and (b) determining the induction of said cellular response to determine if the test compound is an effective inhibitor of Stra6 activity, wherein teh lack of induction of said cellular response is indicative of saif compound being an effective inhibitor.

87. A method for identifying a compound that inhibits the expression of a Stra6 polypeptide in cells that express said polypeptide, wherein said method comprises contacting said cells with a candidate compound, and determining whether expression of said Stra6 polypeptide is inhibited.

88. The method of Claim 87, wherein said candidate compound is an antibody.

89. The method of claim 87, wherein said candidate compound is an antisense

90. A compound that inhibits a biological or immunological activity of a Stra6 polypeptide, identified by a method comprising contacting a candidate compound with said Stra6 polypeptide under conditions and for a time sufficient to allow the two components

to interact, and determining whether a biological or immunological activity of said Stra6 polypeptide is inhibited.

91. The compound of Claim 90, which is an antibody.

92. The compound of Claim 90, which is a small molecule.

93. A Stra6 antagonist compound that inhibits an activity of a Stra6 polypeptide, identified by a method comprising the steps of (a) contacting cells and a candidate compound to be screened in the presence of said Stra6 polypeptide under conditions suitable for the induction of a cellular response normally induced by said Stra6 polypeptide, and (b) determining the induction of said cellular response to determine if the test compound is an effective antagonist, wherein the lack of induction of said cellular response is indicative of said compound being an effective Stra6 antagonist.

94. The compound of Claim 93, which is an antibody.

95. The compound of Claim 93, which is a small molecule.